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## 1. Basic Operations

### *Keys*

Many of the calculators keys are used to perform more than one function. The functions marked on the keyboard are color coded to help you find the one you need quickly and easily.

|   | Functions | Key Operations |
|---|-----------|----------------|
| 1 | Log       | Log            |
| 2 | $10^x$    | Shift-> log    |
| 3 | B         | Alpha->log     |

## 2. Inputting and Editing Calculations

### *Inputting Calculations*

When you are ready to input a calculation, first press AC to clear the display. Next, input your calculation formulas exactly as they are written, from left to right, and press = to obtain the result.

**Example**       $2 + 3 - 4 + 10 =$

### *Editing Calculations*

Use the < and > keys to move the cursor to the position you want to change, and then perform one of the operations described below. After you edit the calculation, you can execute it by pressing = or you can use > to move to the end of the calculation and input more.

Example

To change cos60 to sin60 :

cos60I

<< cosI60 del  
3times I60  
sin sinI60 now move the pointer according to  
requirement.

### 3. Math Input Output Mode

#### Keyboard Math Operations

##### ***Addition, Subtraction, Multiplication, Division***

You can use + (addition), - (subtraction), \* (multiplication), and / (division) with real and complex numbers, expressions, lists, and matrices. You cannot use division with matrices.

Example

1.  $2 + 5 = 7$
2.  $2 * 5 = 10$
3.  $5 - 2 = 3$
4.  $5 / 2 = 2.5$
5. If you need to input  $A/2$ , enter this as  $A * 1/2$  or  $A * 0.5$ .

##### ***Trigonometric Functions***

You can use the trigonometric (trig) functions ( sine (sin) , cosine (cos) , and tangent (tan) ) with real numbers, expressions, and lists. The current angle mode setting affects interpretation Example

**sin(30)** in radian mode returns L.9880316241 ; in degree mode it returns 0.5.

sin ( value )

cos ( value )

tan ( value )

You can use the inverse trig functions (isin , icos, and itan) with real numbers, expressions, and lists. The current angle mode setting affects interpretation.

Example **isin(value)**    **icos(value)**    **itan(value)**

isin(0.5) = 30 in degrees

**Note:** The trig functions do not operate on complex numbers.

### ***Power, Square, Square Root***

You can use ^ ( power), 2 ( square), and√ (square root ) with real and complex numbers, expressions, lists, and matrices.

Example

Valuepower value2

### ***Inverse***

You can use -1 (inverse) with real and complex numbers, expressions, lists, and matrices. The multiplicative inverse is equivalent to the reciprocal.

value-1

Example

inverse(0.5) = 2

### ***Log function***

You can use **log( ( logarithm )** , and **ln( (natural log)** with real or complex numbers, expressions, and lists.

**log(value)**

**ln(value)**

## ***Exponential***

**e ^ ( (exponential)** function returns the value of power of e.

Example

$$\exp(2) = 7.387524$$

## ***Negation***

- (negation) returns the negative of *value*. You can use M with real or complex numbers, expressions, lists, and matrices.

## **4.Using Setup Screen**

You can change the mode of calculator by clicking the icon of required mode you want from the first window of the calculator.

Mode icons present in the top menu:

Standard

Graphing

Mathematical tools

## **5.Manual Calculations**

## ***Basic Calculations***

### Arithmetic Calculations

- Enter arithmetic calculations as they are written, from left to right. Use the – key to input the minus sign before a negative value.

For the mixed arithmetic calculations, multiplication and division are prior than addition and subtraction.

Example

$$2*3-4/2+1=(2*3)-(4/2)+1=6-2+1=5$$

## ***Special Functions***

You can directly select these functions from scientific mode

Functions available: Hyperbolic function

Converter (units, coordinate)

Logarithm

Exponential

Probability/Distribution function

Logical Operators

## **6.Graph Drawing**

### ***Simple Graphs***

To draw the simple graph , select the graph mode .

Now enter the function.

Then enter ok.

### **Drawing graphs on a same screen**

Select the graph mode.

Now enter the functions.

Then click ok.

The graphs of differentiation and integration will be printed.

## **9.Statistical function**

This include following functions:

Mean

Mode

Median

To use the statistical functions , first select the statistical mode.

Then enter the no of entries incsv format.

Then enter the entries.

Then click ok.